

## CLAIMS

1    1. A system for detecting and disabling or killing harmful airborne biota,  
2    particularly insects, comprising:

3                at least one energy-transmitting transmitter positioned to emit a beam  
4    of detection energy over or around an area to be protected from said harmful  
5    airborne biota,

6                a receiver of a return signal of said detection energy from said harmful  
7    airborne biota,

8                one or more data processors for processing said return signal and  
9    identifying said airborne biota, ,

10    a harmful airborne biota killing or disabling system responsive to said one or  
11    more data processors.

1    2. A system as set forth in claim 1 wherein said energy-transmitting  
2    transmitter comprises a radar beam.

1    3. A system as set forth in claim 1 wherein said harmful airborne biota killing  
2    or disabling system comprises a laser beam.

1    4. A system as set forth in claim 1 wherein said harmful airborne biota killing  
2    or disabling system comprises a range-limited beam of energy.

1    5. A system as set forth in claim 4 wherein said range-limited beam of energy  
2    further comprises an energy beam that is attenuated by atmosphere.

1    6. A system as set forth in claim 4 wherein said range-limited beam of energy  
2    further comprises focusing said range-limited beam of energy.

1    7. A system as set forth in claim 4 further comprising a backstop for said  
2    range-limited beam of energy.

1    8. A system as set forth in claim 4 wherein said range-limited beam of energy.  
2    is tilted upward at a relatively shallow angle.

1    9. A system as set forth in claim 8 wherein said backstop is selectively  
2    positioned to block an upwardly tilted said range-limited beam of energy from  
3    an elevated feature so that said range-limited beam of energy cannot impinge  
4    on said elevated feature.

1    10. A system as set forth in claim 1 wherein said energy transmitting  
2    transmitter, said receiver and said a harmful airborne biota killing or disabling  
3    system are mounted on an elevated structure above said area to be protected.

1    11. A system as set forth in claim 10 wherein at least one said elevated  
2    structure is positioned within said area to be protected.

1    12. A system as set forth in claim 10 further comprising a plurality of said  
2    elevated structure positioned around said area to be protected.